

**Notice of Allowability**

Application No.

10/780,841

Examiner

Jaime M. Holliday

Applicant(s)

BACKES ET AL.

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2617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the R.C.E filed September 28, 2006.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

***Terminal Disclaimer***

2. The terminal disclaimer filed on May 15, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/780,841 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Allowable Subject Matter***

3. **Claims 1-4** are allowed.

4. The following is an examiner's statement of reasons for allowance:

Consider **claim 1**, the best prior art found during examination of the present application, **Douthitt et al. (U.S. Patent # 5,524,280)** in view of **Ayerst et al. (U.S. Patent # 5,740,534)**, and in further view of **Black et al. (U.S. Patent # 6,738,599 B2)**, fail to specifically show, disclose or suggest that after scanning

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a plurality of frequencies, creating a scan table, a channel map with device IDs, creating another triplet channel map with groups of three channels, selecting a channel from this map based on lowest average power, transmitting a message on the selected channel, receiving message on this channel and base on this message, updating the scan table, calculating a vector sum representing all average power levels, transmitting message that includes the vector sum on the selected channel, receiving messages on this channel, maintaining a claim table with the device IDs that sent the messages, and evaluating the claim table.

Douthitt et al. show and disclose a general frequency reuse data communications system including a method of acquiring a channel, including fast scanning a predetermined list, reading on the claimed "scan table," of data channels to identify a fast scanned channel, intermediate scanning, and slow scanning. Fast scanning may further include a step of assigning a weight to each channel in the predetermined list of channels and the ranking each channel in accordance with weight, reading on the claimed "sorting of channel map," (abstract, col. 4 lines 1-4). This method is suitable for execution by any processor that has been programmed with the appropriate software and is interfaced with or controlling a receiver arranged to receive signals and assess signal strength, etc. In fast scanning the subscriber unit evaluates each channel in the predetermined list for a first time, reading on the claimed "scan interval," (col. 35-45).

Ayerst et al. show and disclose scanning a plurality of frequencies to determine a control channel to receive a signal and a receiver for receiving the

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signal representative of an available frequency associated with a geographic region. Each signal includes a channel identifier, reading on the claim “device ID,” (abstract). A control channel is one of the available frequency channels that are active for receiving address and system configuration information. When a message is directed to a selective call radio, the site controller transmits the selective call addresses and the channel identifiers on the control channel that indicates the frequency of the outbound message, reading on the claimed “transmitting and receiving messages,” (col. 4 lines 23-29). A selective call transceiver or radio, after it has roamed, will scan through its frequency list until it finds a control channel, reading on the claimed “selected channel,” where it will receive system configuration information which will be stored, (col. 6 lines 39-43).

Black et al. show and disclose a channel map that is created and maintained at each mobile station, which is populated with channel characteristic indicia of channel frequencies that might be available. An apparatus includes a channel map that contains a listing that forms a sequence of channel frequencies and characteristic indicia associated with respective ones of the channel frequencies, reading on the claimed “sorting channel map into a triplet channel map,” (abstract, col. 6 lines 18-22). A channel characteristic supplier includes a channel frequency measurer that measures energy levels. Values determined by the measurer form local values of channel characteristic indicia. Selections made by the controller are responsive to values of the channel characteristic indicia stored at the channel map. The channel map provides a manner by which to rank candidate channel frequencies based upon channel qualities indicated by

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values of the characteristic indicia, reading on the claimed "selecting a channel from the triplet channel map, by selecting the channel with the lowest average power," (col. 6 lines 29-46, col. 7 lines 4-18).

5. Douthitt et al. in view of Ayerst et al., and in further view of Black et al., however, lacks the claimed preclaim messages, claim messages, claim table, and its evaluation, therefore these limitations, in conjunction with the other limitations recited in claim 1, are novel and unobvious in view of the combination of Douthitt et al., Ayerst et al. and Black et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **EXAMINER'S AMENDMENT**

The application has been amended as follows:

Insert in first line of specification:

This application claims benefit of 60/449,602 02/24/2003 and claims benefit of 60/466,448 04/29/2003 and claims benefit of 60/472,320 05/21/2003 and claims benefit of 60/472,239 05/21/2003.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaime M. Holliday whose telephone number is (571) 272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaime Holliday  
Patent Examiner

CHARLES APPIAH  
PRIMARY EXAMINER